REMARKS

This Amendment responds to the office action dated July 13, 2005.

Claim 1 is objected to because it is not terminated with a period. Claim 1 has been amended and is now terminated with a period.

Claims 1-10 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. This rejection is improper in that it fails to recognize the useful, concrete and tangible result of the claim. 35 U.S.C. §101 precludes abstract ideas from patentability, however, each of claims 1-11, claims a method, system or set of computer-executable instruction for completing the acts of determining whether an image element is likely to be self-luminous or correcting an image for color-balance," which are useful, concrete and tangible results of the claimed method, system or set of computer-executable instruction. A practical application of an abstract idea is patentable if it produces a useful, concrete and tangible result. *State Street Bank & Trust Co. v. Signature Financial Group, Inc.,* 47 USPQ2d 1596, 1601-02 (Fed. Cir 1998). Similar software applications have been held patentable by the Federal Circuit when those applications did no more that manipulate numbers for a useful result. *AT&T Corp. V. Excel Comm. Inc.,*50 USPQ2d 1447, 1452 (Fed. Cir. 1999). In AT&T, the useful result was a modified long-distance telephone bill, in this application; the useful result is determining a likelihood that an image element is self-luminous or color-correcting an image. The USPTO has long endorsed this type of claim in their training guidelines for computer-related inventions. A computer data signal or computer-executable instructions are typically regarded as equivalent to a computer readable medium, which is generally

accepted as patentable subject matter when it comprises instructions that cause a computer to create a tangible result. Applicant hereby requests the examiner to reevaluate this rejection.

Claims 1-10 have been rejected under 35 U.S.C. §102(b) as being disclosed by Kim et al., (US Patent 6,249,601), hereinafter Kim et al. Kim et al disclose a system and method for determining the color of an illuminant. Kim et al teach a method that determines the mean vector value for each color channel and then multiply these mean values by coefficients to calculate a self luminous threshold value. Pixels with color coordinates that exceed the threshold are eliminated from the illuminant determination procedure. An image illuminant is then determined based on the mean vectors of the non-self-luminous portions of the image.

Embodiments of the present invention, as claimed in claims 1-11, as amended, comprise methods and systems that are different from the teachings of Kim et al. Some of these embodiments comprise a step in which the spatial proximity of an image element to an image spatial boundary is used to help determine whether an element is likely to be self luminous. Some of these embodiments comprise systems and methods in which each individual image element is separately analyzed to determine an element illuminant. These element illuminants are then weighted by a weighting factor based on the element's likelihood of being self-luminous. The weighted, element illuminants are then used to determine an image illuminant. This is different from the method of Kim et al, who use a mean vector for each color channel.

Claim 1, as amended, comprises the elements of "determining the spatial proximity of said image element to an image spatial boundary" and "modifying said self-luminosity weight factor when said image element is spatially proximate to said image boundary." Kim et al do not disclose any analysis relate to the spatial location or an image element or a spatial proximity to an image spatial boundary. This claim was amended to more particularly point out this distinction.

Claim 2 has been amended to comprise the elements of "determining the spatial proximity of said image element to an image spatial boundary" and "classifying said image element as likely to be self-luminous when said color characteristics, said luminance characteristics and said spatial proximity meet a criterion for self-luminous elements." These elements are not disclosed in Kim et al.

Claim 3 is dependent on claim 2, comprises all the limitations thereof and is allowable for the reasons stated above in relation to claim 2.

Claim 4 has been amended to comprise the element of "modifying said weighting factor based on the spatial proximity of said each image element to an image spatial boundary." As explained with regard to previous claims, Kim et al do not disclose any analysis related to spatial proximity of image elements. Accordingly, claim 4 is believed to be allowable in its currently amended form.

Claim 5 is dependent on claim 4, comprises all the limitations thereof and is allowable for the reasons stated above in relation to claim 4.

Claim 6 has been amended to comprise the elements of "determining an element illuminant for each of said image elements" and "estimating an image illuminant based on said element illuminants adjusted by their corresponding weighting factors." Kim et al teach a mean-vector-based method, which does not determine an illuminant for each image element. Accordingly, this claim is believed to be patentable in its currently amended form.

Claim 7 is dependent on claim 6, comprises all the limitations thereof and is allowable for the reasons stated above in relation to claim 6. Additionally, claim 7 comprises the element of "omitting said correcting image color-balance for image elements that are likely to be self-luminous." Kim et al do not teach selective processing

of non-luminous elements. Accordingly, claim 7 comprises an additional patentable limitation above claim 6.

Claim 8 is dependent on claim 6, comprises all the limitations thereof and is allowable for the reasons stated above in relation to claim 6. Additionally, claim 8 comprises the element of "correcting said image elements according to their likelihood of being self-luminous wherein a full correction is applied to elements that are least likely to be self-luminous, no correction is applied to elements that are most likely to be self-luminous and a partial correction is applied to elements that fall between these limits." Kim et al do not disclose a partial correction of image elements. Accordingly, claim 8 comprises an additional patentable element above claim 6.
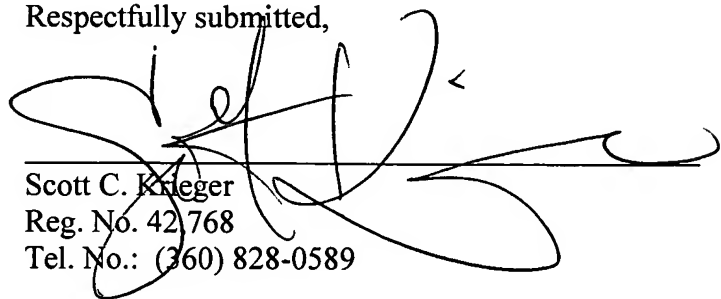
Claim 9 has been amended to comprise the element of "comparing the spatial proximity of said image pixel to image spatial boundaries." This element is not taught by Kim et al. Claim 9 has also been amended to more clearly relate to a computerized operation and more clearly relate to patentable subject matter.

Claim 10 has been amended to comprise the element of "comparing the spatial proximity of said image pixel to image spatial boundaries." This element is not taught by Kim et al. Claim 10 has also been amended to more clearly relate to a computer system.

Claim 11 has been added to add the spatial proximity factor to the other limitations of claim6.

Based on the foregoing amendments and remarks, the Applicant respectfully requests reconsideration and allowance of the present application.

Respectfully submitted,

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